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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

ENG, DAVID Y

ART UNIT

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/771,724	Applicant(s) KOBAYASHI, NAOFUMI	
	Examiner DAVID Y. ENG	Art Unit 2455	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 October 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2 and 4-25 is/are pending in the application.
- 4a) Of the above claim(s) 20,21,24 and 25 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-2, 4-19 and 22-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim 3 has been cancelled. Claims 1-2 and 4-25 are pending. Claims 20-21 and 24-25 are withdrawn from consideration. The active claims are 1-2, 4-19 and 22-23. Applicants are requested to cancel the non-elected claims 20-21 and 24-25.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-2, 19 and 22 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

With respect to all independent claims, recitation of the first layer and the second layer is vague and indefinite. It is not clear what they are.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-2 and 4-19 and 22-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hejna (USP 6,934,759) in view of Sandstrom (USP 7,254,138).

Details of the rejections have already been set forth in the last Office action. The details are incorporated herein by reference thereto.

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Response

Applicants contended that the claimed data generating device converts multicast data to unicast data. However, there is no such conversion recited in the claims. Similar to the conventional type of multicast delivering system, the instant data generating device merely generates copies of forwarding material, one for each of the multicast recipients. Further, there is no layer two switch or any switch of any type recited in the claims as argued by Applicants.

Claim Rejections - 35 USC § 103

Claims 1-2 and 4-19 and 22-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hejna (USP 6,934,759) in view of Itonaga (USP 7,450,580).

See at least the description in lines 33-59 of column 10 in Hejna. Hejna teaches:

Claims 1, 2, 4, 5, 7, 19, 22, 23

A data generating device (Figure 1 or 7) installed on an upstream side of a switching device (network 3990 and its servers, gateways and routers, etc.) (since the outputs of devices shown in Figure 7 are for outputting data to network 3990, they are at the upstream side) for performing switching based on data of a first layer, comprising:

reading unit (the circuit in Hejna which reads the recipient list) to read forward management information (recipient list) relating to a forwarding process

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(broadcast) of forward data (column 9/lines44-48) to be forwarded to one or more clients from data of a second layer higher than the first layer;

storage unit (the buffer in Hejna which stores the read out recipient list) to store the forward management information read by said reading unit;

data generating (media broadcast server 2000 of Figure 1 or multi-caster 3300 of Figure 7, column 10/ line 33-59) unit to identify one or more clients (recipients), each of which corresponds to a forward destination of the forward data, on the basis of the forward management information (recipient list, column 10/line 41) stored in said storage unit, and to generate the same number of pieces of transmission data as a number of identified clients (obvious teaching of Itonaga, the second reference), wherein each of the pieces of transmission data includes equivalent contents to the forward data and has an address of a corresponding one of the identified clients as a destination address of the first layer of the transmission data; and

forwarding unit (media broadcast server 2000 of Figure 1 or processor 3500 of Figure 7, column 10/line 60 to column 11/line11) to forward each piece of transmission data generated by said data generating unit to the switching device in order to transmit each piece of transmission data to each client corresponding to the forward destination.

Hejna does not teach converting multicast addresses to unicast addresses so that the same number of copies of forwarding data corresponding to the number of unicast addresses can be made and forwarded. Itonaga teaches layered multicast system (see abstract). Itonaga further teaches converting

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multicast address to unicast addresses for forwarding data (see column 1, line 34-38). From the teaching of Itonaga, it would have been obvious to a person of ordinary skill in the art to convert the multicast addresses in Hejna to unicast addresses such that only those clients who want the data would receive the data. Making same number of copies for delivery is inherent in the Itonaga system.

Claims 6, 12 , 13, 14, 15, 16,

The “wherein clauses” merely consist of non-functional descriptive material. As to claim 6, further see also MAC protocol in column 21/line 34 in Sandstrom.

Claims 8, 9, 10, 11,

Up date is inherent in a system like Hejna. The device being used for enter data in the system of Hejna can be considered as an update unit.

Claims 17, 18

Addresses of destination and source are inherent in communication system because they are essential. As to timing, see the description of rebroadcast interval determiner 3700 in Figure 7.

Other Cited References

See the abstract in 7,383,345; 7,161,934; 7,082,142; 7,043,528 and 6,957,277. They all teach that conversion between multicast addresses and unicast address is well known in the art.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to DAVID Y. ENG whose telephone number is 571-272-3984. The examiner can normally be reached on M-F from 8AM to 3PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, SALEH NAJJAR, can be reached on 571-272-4006. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/DAVID Y. ENG/
Primary Examiner, Art Unit 2455